EXHIBIT 1
DATE 1/27/09
HB 236

Coliform bacteria

Coliform bacteria are a commonly used bacterial indicator of the sanitary quality of water. They are defined as rod-shaped gram-negative organisms. Coliforms are abundant in the feces of warm-blooded animals but can also be found in aquatic environments, in soil and on vegetation. In most instances, coliforms themselves are not the cause of sickness, but they are easy to culture and their presence is used to indicate that pathogenic organisms of fecal origin may be present.

Escherichia coli (E. coli), a member of the coliform group, is almost exclusively of fecal origin. E. coli are not always confined to the intestine, and their ability to survive for brief periods outside the body makes them an ideal indicator organism to test environmental samples for fecal contamination. In general, increased levels of fecal coliforms provide a warning of failure in water treatment, a break in the integrity of the distribution system, or possible contamination with pathogens. When levels are high there may be an elevated risk of waterborne gastroenteritis. Laboratory tests for the bacteria are cheap, reliable and rapid.

While the presence of E. coli in the digestive tracts of humans and other warm-blooded animals is normal, and in several aspects beneficial, several strains of E. coli are pathogens. Escherichia coli O157:H7 is an enterohemorrhagic strain of the bacterium Escherichia coli that occasionally causes local and regional outbreaks of sickness and death.